

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the captioned patent application:

Listing of Claims:

1. (Canceled)
2. (New) A method comprising:
 - selecting at least one method of a class for instrumentation;
 - inserting instrumentation code in the selected at least one method without modifying a source code of the selected at least one method by inserting bytecodes into the selected at least one method;
 - executing the bytecodes during execution of the at least one method; and
 - generating a call, by the executed bytecodes, to an interface wherein the call comprises information regarding the instrumented at least one method.
3. (New) The method of claim 2, wherein inserting instrumentation code in the selected at least one method comprises:
 - generating a wrapper method that contains the instrumentation code and the at least one method.
4. (New) The method of claim 3, wherein generating a wrapper method comprises:
 - renaming the at least one method from an original name to a new name;
 - creating a wrapper method with the original name;
 - inserting bytecodes into the wrapper method that when executed generate the call to the interface; and
 - inserting bytecodes into the wrapper method that when executed call the renamed at least one method.
5. (New) The method of claim 4, wherein generating a wrapper method further comprises:
 - setting a flag of the renamed at least one method to private;

6. (New) The method of claim 2, wherein the selecting at least one method comprises:
selecting at least one method of a class for instrumentation when the class is being loaded by a java virtual machine (JVM) for execution by the JVM.

7. (New) The method of claim 2, wherein the selecting at least one method comprises:
selecting at least one method of a class for instrumentation prior to execution of the class by a java virtual machine (JVM).

8. (New) The method of claim 2, further comprising:
monitoring the at least one method using the information regarding the instrumented at least one method.

9. (New) A system comprising:
a control object configured to select at least one method of a class for instrumentation;
an instrumentation tool configured to insert instrumentation code in the selected at least one method without modifying a source code of the selected at least one method by inserting bytecodes into the selected at least one method; and
a java virtual machine configured to execute the at least one method including the inserted bytecodes; and
an interface configured to receive a call generated by the executed bytecodes, wherein the call comprises information regarding the instrumented at least one method.

10. (New) The system of claim 9, wherein the instrumentation tool is configured to insert instrumentation code in the selected at least one method by generating a wrapper method that contains the instrumentation code and the at least one method.

11. (New) The system of claim 10, wherein the instrumentation tool is configured to generate the wrapper method by renaming the at least one method from an original name to a new name, creating a wrapper method with the original name, inserting bytecodes into the wrapper method that when executed generate the call to the interface, and inserting bytecodes into the wrapper method that when executed call the renamed at least one method.

12. (New) The system of claim 11, wherein the instrumentation tool is further configured to set a flag of the renamed at least one method to private.

13. (New) The system of claim 9, wherein the instrumentation tool is configured to select the at least one method of a class for instrumentation when the class is being loaded by a java virtual machine (JVM) for execution by the JVM.

14. (New) The system of claim 9, wherein the instrumentation tool is configured to select the at least one method of a class for instrumentation prior to execution of the class by a java virtual machine (JVM).

15. (New) The system of claim 9, further comprising:

A plug-in instrument configured to receive the information regarding the instrumented at least one method for monitor the at least one method.

16. (New) A system comprising:

means for selecting at least one method of a class for instrumentation;

means for inserting instrumentation code in the selected at least one method without modifying a source code of the selected at least one method by inserting bytecodes into the selected at least one method;

means for executing the bytecodes during execution of the at least one method; and

means for generating a call, by the executed bytecodes, to an interface wherein the call comprises information regarding the instrumented at least one method.

17. (New) The system of claim 16, wherein the means for inserting instrumentation code in the selected at least one method comprises:

means for generating a wrapper method that contains the instrumentation code and the at least one method.

18. (New) The system of claim 17, wherein the means for generating a wrapper method comprises:

means for renaming the at least one method from an original name to a new name;

means for creating a wrapper method with the original name;

means for inserting bytecodes into the wrapper method that when executed generate the call to the interface; and

means for inserting bytecodes into the wrapper method that when executed call the renamed at least one method.

19. (New) The system of claim 18, wherein the means for generating a wrapper method further comprises:

means for setting a flag of the renamed at least one method to private;

20. (New) The system of claim 16, wherein the means for selecting at least one method comprises:

means for selecting at least one method of a class for instrumentation when the class is being loaded by a java virtual machine (JVM) for execution by the JVM.

21. (New) The system of claim 16, wherein the means for selecting at least one method comprises:

means for selecting at least one method of a class for instrumentation prior to execution of the class by a java virtual machine (JVM).

22. (New) The system of claim 16, further comprising:

means for monitoring the at least one method using the information regarding the instrumented at least one method.